

Notice of Allowability

Application No.

09/895,933

Applicant(s)

NELSON ET AL.

Examiner

James R Scott

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 9/09/2003.
2. ☒ The allowed claim(s) is/are 1-5, 7-9, 11, 12, 14 and 27-41.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No. _____.
 - (b) ☒ including changes required by the proposed drawing correction filed 09 September 2003, which has been approved by the Examiner.
 - (c) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>1003</u> |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

CLAIMS

Claims 28-41, line 1, the numeral 13 has been cancelled and the numeral – 27 – has been inserted.

The amended dependent claims 28-41 appear below and replace the new dependent claims 28-41.

Claim 28 (once amended): The circuit layout of claim [13] 27, further comprising an adhesive positioned between first and second membrane layers.

Claim 29 (once amended): The circuit layout of claim [13] 27, further comprising a first adhesive positioned between first and second membrane layers and a second adhesive positioned between second and third membrane layers.

Claim 30 (once amended): The circuit layout of claim [13] 27, wherein the first and second adhesives are selectively printed for openings on the bottom surface of the second and third membrane layers, respectively.

Claim 31 (once amended): The circuit layout of claim [13] 27, wherein the adhesive first and second adhesives are adhesive layers positioned between first and second membrane layers and the second and third membrane layers, respectively, the adhesive layers having openings selectively cut there through.

Claim 32 (once amended): The circuit layout of claim [13] 27, wherein the thru-holes in the second membrane layer connect the conductive circuit trace printed on the second membrane layer with the conductive circuit trace printed on the first membrane layer.

Claim 33 (once amended): The circuit layout of claim [13] 27, wherein the thru-holes in the third membrane layer connect the conductive circuit trace printed on the third membrane layer with the conductive circuit trace printed on the first membrane layer.

Claim 34 (once amended): The circuit layout of claim [13] 27, wherein the thru-holes in the third membrane layer and the thru-holes in the second membrane layer connect the conductive circuit trace printed on the third membrane layer with the conductive circuit trace printed on the first membrane layer.

Claim 35 (once amended): The circuit layout of claim [13] 27, wherein conductive ink at least partially fills the thru-holes.

Claim 36 (once amended): The circuit layout of claim [13] 27, wherein the membrane layers are electrically insulating.

Claim 37 (once amended): The circuit layout of claim [13] 27, wherein the second membrane layer electrically insulates traces printed on its top surface from traces printed on the first membrane layer and the third membrane layer electrically insulates traces printed on its top surface from traces printed on the second membrane layer.

Claim 38 (once amended): The circuit layout of claim [13] 27, wherein pads for receiving conductive ink are printed on the first membrane layer corresponding to the

location of the thru-holes in the second membrane layer and pads for receiving conductive ink are printed on the second membrane layer corresponding to the location of the thru-holes in the third membrane layer.

Claim 39 (once amended): The circuit layout of claim [13] 27, wherein the first membrane layer is a film layer between 0.001 and 0.007 inches thick.

Claim 40 (once amended): The circuit layout of claim [13] 27, wherein the second membrane layer is a film layer between 0.001 and 0.007 inches thick.

Claim 41 (once amended): The circuit layout of claim [13] 27, wherein the third membrane layer is a film layer between 0.001 and 0.007 inches thick.

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DRAWINGS

The following changes to the drawings must be made:

The drawings must be corrected as indicated on the attached form PTO-948. In addition provide proper reference character and lead lines in figures 1,2 and 3. The figure legends Fig. 1 and Fig. 2 should be changed to read as Fig. 1a and Fig. 2a respectively. The proposed drawing figures 1b and 2b are approved.

A copy of the form PTO-948, which was attached to the first Office Action, is enclosed per applicant's representative's request.

The original drawing figures must be corrected as stated on the attached form PTO-948, "Notice of Draftsperson's Patent Drawing Review," which was appended to the first Office Action.

Make appropriate correction wherever necessary in the specification pertaining to changes made in the figures. Avoid entry of new matter.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

REMARKS

Authorization for this examiner's amendment pertaining to amendment of the claims 29-41 was given in a telephone interview with applicant's representative, Alicia Mills, on Monday October 6, 2003.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R Scott whose telephone number is 703-308-2013. The examiner can normally be reached on any workday between 1-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 703-308-7619. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3432 for regular communications and 703-305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

JRScott: jrs

October 6, 2003


J. R. SCOTT
PRIMARY EXAMINER
ART UNIT ~~214~~ 2832